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| APPLICATION NO.                    | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.  | CONFIRMATION NO. |
|------------------------------------|-------------|----------------------|----------------------|------------------|
| 10/663,846                         | 09/17/2003  | Shuichi Takamiya     | 018995-739           | 2839             |
| 21839                              | 7590        | 02/17/2005           | EXAMINER             |                  |
| BURNS DOANE SWECKER & MATHIS L L P |             |                      | GILLIAM, BARBARA LEE |                  |
| POST OFFICE BOX 1404               |             |                      | ART UNIT             |                  |
| ALEXANDRIA, VA 22313-1404          |             |                      | PAPER NUMBER         |                  |

1752

DATE MAILED: 02/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/663,846

Applicant(s)

TAKAMIYA, SHUICHI

Examiner

Barbara L. Gilliam

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 17 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 9/17/2003.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Claims***

2. Claims 1-14 are pending.
3. Claims 4-14 further limit either the cationic surfactants or the compounds having three or more of an ethylene oxide-terminal group without requiring the selection of either over the other.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1, 3-14 are rejected under 35 U.S.C. 102(e) as being anticipated by Oda (US 2004/0131966 A1).

a. The applied reference has a common assignee with the instant application.

Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either

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by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

b. Oda teach a thermosensitive lithographic printing plate comprising on a hydrophilic support, a lower layer comprising a water-insoluble and alkali-soluble resin and an upper thermosensitive layer comprising a water-insoluble and alkali-soluble resin and an infrared absorbing dye, whose dissolution in an alkaline aqueous solution increases upon exposure (abstract). Upon exposure to near infrared to infrared light, the printing plate is developed ([0168]-[0169]). The alkaline development processing solution comprises a nonionic surfactant ([0173]) in an amount of from 0.001 to 5% by weight ([0176]). Preferably, the nonionic surfactant is a compound represented by formula (I) with compounds represented by formula (II) being particularly preferred ([0177]-[0183]). These compounds meet the present limitations for the compound having three or more of an ethylene oxide-terminal group. In formula (II), those having a molecular weight of 1,00 to 4,000 are preferred ([0184]). Oda teaches the presence of the polyoxyethylene alkyl ether nonionic surfactant in the alkaline development processing solution with sufficient specificity.

### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 2 is rejected under 35 U.S.C. 103(a) as being obvious over Oda (US 2004/0131966 A1).



a. The applied reference has a common assignee with the instant application.

Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). For applications filed on or after November 29, 1999, this rejection might also be overcome by showing that the subject matter of the reference and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person. See MPEP § 706.02(l)(1) and § 706.02(l)(2).

b. Oda teach a thermosensitive lithographic printing plate comprising on a hydrophilic support, a lower layer comprising a water-insoluble and alkali-soluble resin and an upper thermosensitive layer comprising a water-insoluble and alkali-soluble

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resin and an infrared absorbing dye, whose dissolution in an alkaline aqueous solution increases upon exposure (abstract). Upon exposure to near infrared to infrared light, the printing plate is developed ([0168]-[0169]). The alkaline development processing solution comprises a nonionic surfactant ([0173]-[0184]). In addition, surfactants including anionic, cationic, ampholytic and fluorine based can be added to the alkaline development processing solution ([0222]) in an amount of from 0.001 to 10% by weight ([0226]). Examples of cationic surfactants include alkylamine salts and quaternary ammonium salts such as tetrabutylammonium bromide ([0224]). It would have been obvious to one of ordinary skill in the art to add a surfactant such as a cationic surfactant to the alkaline development solution of Oda in an amount of from 0.001 to 10% by weight with reasonable expectation of obtaining a development processing solution with less surface tension.

8. Claims 1-2, 4-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Verschueren et al. (US 6,340,815 B1).

a. Verschueren et al. teach a heat mode imaging element for making a lithographic printing plate having on a lithographic base, a first layer including an aqueous alkaline solution soluble polymer and a top layer on the same side of the lithographic base wherein the top layer comprises an IR-dye or pigment, preferably an IR-cyanine dye and a binder resin (abstract; column 4, lines 58-67). As the binder resin, poly(meth)acrylates can be used (column 5, lines 33-37) which meets the present limitations for the water-insoluble and alkali soluble resin of the upper heat-sensitive layer. Upon imagewise exposure to IR-radiation, the heat mode imaging element is

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developed with an aqueous alkaline developer whereby the exposed areas of the first and top layer are dissolved (claim 9; column 8, line 44 – column 9, line 67). Surfactants are preferably included in the developer including quaternary ammonium salts such as tetraalkylammonium oxides in an amount of not more than 5% (column 10, lines 1- 55). Therefore it would have been obvious to one of ordinary skill in the art to incorporate a surfactant such as a quaternary ammonium salt in the developer of Verschueren et al. with reasonable expectation of enhancing the developing stability of the developer based on the teachings of Verschueren et al. (column 10, line 23-25).

### ***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

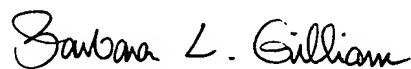
a. In US 2003/0194653 A1, also by Takamiya, a method for preparing a lithographic printing plate is disclosed.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Barbara L. Gilliam whose telephone number is 571-272-1330. The examiner can normally be reached on Monday through Thursday, 8:00 AM - 5:30 PM.

a. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly can be reached on 571-272-1526. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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b. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Barbara L. Gilliam  
Primary Examiner  
Art Unit 1752

bg  
February 14, 2005